

105 CONTROL OF WORK

105.01 ENGINEER'S AUTHORITY

The Engineer will have the authority for administration and engineering supervision of the contract.

The Engineer will decide any question as to interpretation of the Contract including quality and acceptability of furnished materials, work performed, rate of progress and acceptable contract fulfillment. The Engineer has authority to suspend work wholly or in part due to the Contractor's failure to correct conditions unsafe for workmen or the general public; for failure to carry out contract provisions; for such periods needed due to unsuitable weather; for conditions deemed unsuitable for prosecution of the work; or for any condition in the public interest. The Engineer has authority to reject any piece of equipment, staging, formwork or other appliance considered unsafe, improper, or inadequate; whether or not the Engineer exercises this authority, the Contractor is not relieved of his responsibility for safe and proper execution of the Contract.

The Engineer will determine the quantity of each item of work performed and materials furnished, and such decision and estimate for partial payment shall be final and conclusive; such estimate shall be a condition precedent to the Contractor's right to receive any money due under the Contract. In the event of disagreement with the Engineer's decision, the Contractor will have the right to present the matter in dispute to the Contracting Officer for decision pursuant to contract provisions.

105.02 PLANS AND WORKING DRAWINGS

(A) REPRODUCIBLE PLANS. Upon request from the Contractor, the District will furnish free of cost for the Contractor's use, one set of fullsize reproducible project plans printed from official plans.

(B) SHOP AND WORKING DRAWINGS. Shop and working drawings, when required, shall be prepared by the Contractor and submitted to the Engineer sufficiently ahead of proposed work so that review, correction and approval actions as described will not delay construction operations.

(1) GENERAL. Shop drawings shall be drawn in ink on a good grade tracing vellum or, in lieu of ink drawings, satisfactorily photo reproduced from pencil drawings on a tracing vellum or plastic. Drawings shall be prepared on 22 inch by 36 inch sheets and dated. One set of inked vellums or photo-reproduced vellums of all approved shop drawings shall be delivered to the Engineer at the completion of the project.

Working drawings shall be drawn or printed on a material from which clean reproducible copies may be obtained; vellums will not be required.

Working drawings, catalog cuts, performance data and other needed information, for those features that require selection by the Contractor, shall show in detail or by written description the proposed methods and data in sufficient detail so that strengths and sufficiencies can be checked.

The Contractor shall not use any shop or working drawing which does not bear the authorized approval stamp. No work for which shop and working drawings are required shall be started until drawings have authorized approval.

Approval of shop and working drawing by the District shall not relieve the Contractor of his responsibility to furnish all materials and perform all work required by the Contract.

The District is not responsible for discrepancies, errors and omissions on drawings furnished by the Contractor, even though drawings containing discrepancies, errors and omissions were approved.

No change shall be made to approved shop and working drawings without resubmission. Any change so made shall be clearly marked and dated.

(2) SUBMISSION PROCEDURE. The Contractor shall submit to the Engineer one dated copy plus one dated reproducible copy of shop drawings for reinforcing steel, structural steel, Class A stone masonry, railing, electrical work, guiderail, permanent sheeting, temporary structures and other design details as determined by the Department; and one dated copy plus one dated reproducible copy of working drawings for formwork and falsework, bracing, bridging, scaffolding and other construction details as determined by the Engineer.

Two (2) copies of working drawings also are required for sheeting, shoring, PCC forms for structures, staging, cofferdams and underpinning; and shall be prepared under the direction and bear the seal of a Registered Professional Engineer; these drawings shall be accompanied by calculations for all stress-carrying members.

The Contractor shall submit 6 dated copies plus 1 dated reproducible copy of shop and working drawings for sewer and watermain work showing details for pipe layouts, joints and harnessing, fittings, valves, pile thrust block layouts, pipe reinforcement, and other manufactured equipment and materials. Design data and computations shall be included when requested. For pressure conduits and rubber gasket jointed pipe, a check list shall be submitted showing sequence of submission of anticipated drawings, geometry sheets, bills of material, and laying schedules. Each item shall be tabulated by number, title, sheet or other means of positive identification.

Every effort will be made to return the reproducible copy to the Contractor for any correction required to secure approval within 21 consecutive calendar days after receipt.

The Contractor shall resubmit 1 corrected and dated copy plus 1 corrected and dated reproducible copy of drawings, other than sewer and watermain drawings, until approved.

The contractor shall resubmit 6 corrected and dated copies plus 1 corrected and dated reproducible copy of sewer and watermain drawing until approved.

Following approval, the approved reproducible copy will be sent to the Contractor who shall make distribution as specified:

1 copy of shop drawings to Chief Design Engineer.

3 copies of shop and working drawings to the Chief Construction Engineer.

6 copies of sewer and water drawings to the Chief Design Engineer.

No measure nor payment will be made for shop and working drawings. Cost shall be reflected and distributed in applicable pay items.

105.03 CONFORMITY WITH PLANS AND SPECIFICATIONS

All work performed and all materials furnished shall be in conformity with the lines, grades, cross sections, dimensions, material and construction requirements, including tolerances, shown on the plans or indicated in the specifications.

In the event the Engineer finds the materials furnished, work performed, or the finished product not in conformity with the Contract documents, but that reasonably acceptable work has been produced, the Engineer shall then make a determination as to whether the work shall be accepted and remain in place. In this event, the Engineer will document the basis of acceptance by contract modification which will provide for an appropriate adjustment in the contract price for such work or materials necessary to conform to his determination. Any action taken pursuant to this paragraph may not result in an increase of the contract price.

In the event the Engineer finds the materials furnished, work performed, or the finished product are not in reasonably close conformity with the contract documents and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.

105.04 COORDINATION OF PLANS AND SPECIFICATIONS

The Contractor shall take no advantage of any error or omission in the plans or of any discrepancy between the plans and specifications, supplemental specifications or special provisions, and the Engineer shall make such corrections and interpretations as may be deemed necessary for the satisfactory completion of the work.

On all plans, the calculated dimensions will govern in case of discrepancy over the scaled dimensions.

105.05 COOPERATION WITH UTILITY RELOCATION

The Department will notify all utility companies, all pipe line owners, or other parties affected, and endeavor to have all necessary adjustments of the public or private utility fixtures, pipe lines, and other appurtenances within or adjacent to the limits of construction, made as soon as practicable.

Before commencing excavation or demolition work the Contractor shall notify affected parties in conformance with 107.15.

The Department of Public Works' records on locations of utility lines are on file in the Public Space Permits and Records Division of the Design, Engineering and Construction Administration. These files are available for the Contractor's use. However, such use shall not be the basis of any claim against the District.

Utility work will be performed by utility owners at no cost to the Contractor except for utility work included as part of the Contract. Vault adjustments will be made by vault owners. It is anticipated that utility or vault work to be performed by others will not interfere with work under the contract; however, should work by others become necessary during the life of the contract, the Contractor shall cooperate accordingly.

105.06 FIELD LAYOUT

(A) GENERAL. The Engineer will furnish all lines, grades and measurements necessary for grading and paving projects. The Engineer will furnish only the baseline and bench marks for bridge and other structure projects including associated paving work. The Contractor shall perform all remaining engineering layout in an approved manner. Layout for bridge and other structure projects shall be performed by competent surveyors under the direction of a Registered Professional Engineer.

The Contractor shall perform all layout for landscape work except for street line trees which will be located by the Tree Maintenance Division.

Work shall be performed only within authorized lines and grades; operations outside authorized areas will not be included for measure and payment.

Stakes or marks the Engineer sets for guidance shall be preserved by the Contractor. If, in the opinion of the Engineer, stakes are displaced, removed or lost due to Contractor's negligence, they will be replaced by the Engineer and charged the Contractor at \$20.00 per stake.

(B) MATCH OLD WORK. The Contractor assumes full responsibility for successfully carrying out the complete construction and the fitting of all members. Dimensions shown on the drawings taken from original design and shop drawings are not guaranteed. Where new work is to be fitted to old work, the Contractor shall be responsible for checking all dimensions and conditions in the field. If the parts do not fit properly, the Contractor shall make alterations to the new parts necessary to assure proper fit and connection in accordance with instructions of the Engineer, at no additional expense to the District.

Prior to preparing his bid, the Contractor shall visit the worksite and carefully examine the condition of the various parts of the structure and then include in his bid, costs for making measurements necessary or convenient for the proper completion of the work.

105.07 INSPECTOR'S AUTHORITY

Department Inspectors have authority to inspect all work and furnished materials. Such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the material to be used. In case of dispute between the Contractor and Inspector, the Inspector has authority to reject work and materials and to suspend work until the Engineer is able to resolve the case. Inspectors have no authority to alter, waive or add to contract requirements, nor to approve or accept any portion of the work.

105.08 LOAD RESTRICTIONS

The Contractor shall comply with all legal load restrictions in the hauling of materials on the streets and bridges beyond the limits of the project. A special permit will not relieve the Contractor of liability for damage which may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures, or appurtenances will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed by the Engineer to prevent damage to any portion of the pavement structure or underlying utilities. No loads will be permitted on a concrete pavement, base or structure before the expiration of the curing period. In no case shall legal load limits be exceeded unless permitted in

writing. The Contractor shall be responsible for all damage done by hauling equipment.

105.09 FAILURE TO MAINTAIN ROADWAY OR STRUCTURE

If the Contractor, at any time fails to maintain the site properly in conformance with the terms of the contract documents, the Engineer will immediately notify the Contractor of such noncompliance. If the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Engineer may immediately proceed to maintain the project, and the entire cost of the maintenance will be deducted from monies due or to become due to the Contractor.

105.10 WEEKEND WORK

No work shall be permitted on Saturdays or Sundays without prior written approval of the Contracting Officer, his designee or as otherwise specified in the contract.

105.11 NIGHT WORK

The Contractor shall work at night when it is specified or when, in the judgment of the Contracting Officer, such action is necessary. For this purpose it will be incumbent upon the Contractor to furnish sufficient lights so that the laborers, foremen, and inspectors may be able to see that the work is prosecuted in a satisfactory manner.

105.12 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK AND MATERIALS

No work shall be performed or materials ordered or furnished for the project without supervision or inspection by a representative of the Department.

Work done prior to Notice to Proceed, work beyond project limits intended by plans or as directed, work done during a work suspension, work deviating from requirements without written authority, extra work done without authority or work done contrary to the Engineer's instructions will be considered unauthorized. The District is not obligated to pay for unauthorized work. Unauthorized work and materials may be ordered removed and replaced as directed at Contractor expense.

105.13 INSPECTION - ACCEPTANCE

(A) GENERAL. Any work or materials determined to be unacceptable under 105.12 may be ordered removed and replaced at Contractor expense. Failure to inspect or reject work or material shall not in any way imply acceptance, nor prevent the District from later rejecting the work.

Costs associated with inspection services will not be permitted in claims nor as a basis of claims.

When a unit of government other than the District, or a railroad has an interest in or is affected by the Contract, its respective representatives shall have the right to inspect the portion of the work affecting its interests. Such inspection shall not make any government unit or railroad a party to the Contract nor interfere with the rights of the District or the Contractor.

(B) PARTIAL ACCEPTANCE. When the Contractor completes a suitable unit or portion of the

project, the Engineer may make, or the Contractor may request, final inspection of that unit. If the Engineer finds the unit complete and meets contract requirements, he may accept in writing that unit as complete which written acceptance shall include a description of specific work accepted, and the Contractor may be relieved of further responsibility for the accepted unit. Such partial acceptance shall not void nor alter any contract provision.

(C) FINAL INSPECTION AND ACCEPTANCE. Within 30 consecutive calendar days after receipt of written notice from the Contractor that contract work is complete and the project area cleaned up, the Engineer will make final inspection of the project. The Contractor shall promptly correct any deficiency as determined, and upon acceptable completion of all work and cleanup the Engineer will certify in writing as to completion and the amount and value of each class of completed work for purposes of final payment. All prior certificates or estimates upon which partial payments may have been made will be subject to correction in the final payment.

The project will not be accepted until the Contractor has met all contract requirements.